



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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July 9, 1997

Duane Crutchfield
Ash Grove Cement Company
P.O. Box 51
Nephi, Utah 84648

Re: Preliminary Permit Review, Ash Grove Cement Company, County Canyon Mine, M/023/024, Juab County, Utah

Dear Mr. Crutchfield:

On December 31, 1996, the Division received Ash Grove Cement Company's plan amendment for the County Canyon mine. Due to permitting backlog, the Division attempted to expedite the review by meeting Duane Wise on site February 14, 1996, to discuss current plans as well as future plans. At this meeting, the operator was given information on how to improve their current mining and reclamation plan submittal to include the necessary permitting items. This information was discussed with both Mr. Wise and Mr. Robinson on-site and in the office. The fact that the bonding information was inadequate was stressed at that time and an example bonding form was given to Mr. Robinson and Mr. Wise to show how the Division needed the reclamation costs broken out in the plan. For example, the pads would be ripped and drill seeded involving a certain cost per acre. A drainage would need to be reconstructed involving a certain cost per linear foot, etc.

Following our on-site visit the Division received an updated copy of the revised "County Canyon Mining Plan Addendum." This addendum did not include the road. On April 25, 1997, the Division received a revised bond estimate which included the reclamation of the road. On April 11, 1997, the Division received another piece of correspondence which referenced the original mine site as 14 acres, the revised mine site as 17.38 acres, the access road as 7.5 acres for both plans, plus some revised sketches. The original December 31, 1996 plan, referenced the total disturbance as 30.29 acres including the road. This conflicts with the total disturbed acreage referenced in the April 11, 1997 submittal. The Division's draft bond estimate uses the 30.29 acres from the December 31, 1996 submittal. The original plan was bonded for 21.5 acres of disturbance.

The Division has prepared a preliminary review of the County Canyon Mine plan amendment which is enclosed. Certain unknowns had to be assumed in order to calculate a reclamation bond. Due to the lack of specificity and consistency found in the current plan and the number of submittals which contain conflicting information the Division has calculated a bond amount. A clear and detailed reclamation plan could result in a reassessment of the bond amount.



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The Division requests that Ash Grove consolidate all revised information into a comprehensive new document. If you have any questions regarding this letter or review, the Division will be glad to discuss them at your earliest convenience. Please contact me at 538-5321 or Mr. Randy Harden, Mining Engineer, at 538-5285.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Munson", with a long horizontal flourish extending to the right.

Tom Munson
Senior Reclamation Specialist

jb
Enclosure: Review Comments
cc: Allen Finch, Ash Grove Cement Co.
Ron Tessner, BLM, House Range RA
M023024.rew

REVIEW COMMENTS - PLAN AMENDMENT

**Ash Grove Cement Company
County Canyon Mine**

**M/023/024
(July 9, 1997)**

A map entitled "County Canyon Contours and Existing Pit" was provided as part of the amendment. This map shows the extent and acreage for the existing pit areas as well as the extensions to the three areas. Additional maps showing the borehole locations and cross sections through the pit were provided in the proposal.

R647-4-106 - Operation Plan

The proposal includes the drilling of seven borehole lines spaced at 100 foot intervals with holes spaced at 50 feet. An estimated total of 40 holes would be drilled to help delineate the shale deposit being mined. Pioneer roads will be developed in conjunction with the drilling operations and will require approximately 300 feet of 10-foot wide temporary roadways.

Currently the mining area is subdivided into three areas (phases). Each of these areas is proposed to be extended. The current disturbed areas within the mine area is 13.65 acres and the proposal increases the mine area an additional 9.14 acres. The total proposed disturbed area, including 7.5 acres of haul roads, is 30.29 acres.

Mining operations and practices are expected to remain the same as proposed in the original NOI except that the reserves for the mine would increase by approximately 200,000 tons.

R647-4-110 - Reclamation Plan

No significant changes to the reclamation plan are anticipated as a result of the additional drilling or extension of the pit area. The pioneer roads and boreholes will eventually be absorbed into the pit operations, consequently, no additional reclamation costs for the temporary roads or boreholes has been factored into the bond estimate.

R647-4-111 - Reclamation Practices

Specific reclamation treatments, including designs for construction, equipment selection, productivity calculations, and quantity takeoffs for the work to be accomplished are not presented in the reclamation plan. This lack of specificity in the plan is reflected in the Division's determination of the bond amount. However, the general commitments made in the plan regarding reclamation of the site are considered satisfactory to demonstrate that the area can suitably be reclaimed.

R647-4-113 - Surety

Information presented in the NOI and subsequent amendments to the plan is considered inadequate by the Division in determining the bond amount. The operator's estimate is not acceptable for several reasons: quantities of materials (cubic yards) were not calculated for regrading the site;

equipment selection and productivity calculations were not provided; unit costs were not referenced as to their source; and drainage designs and quantities for riprap materials were not determined as part of the reclamation plan.

Because site specific calculations were not provided in the plan, the Division cannot determine costs based on those data. Accordingly, the Division has determined costs involved with reclamation primarily using published cost information from MEANS SITE COST DATA, 1997, and applying those costs to the bond estimate.

Determination of Surety Amount			Last Revised	July 9, 1997
County Canyon Shale Quarry, Ash Grove Cement Company		M/023/024	Juab County	Utah
ACTIVITY	QUANTITY	UNITS	COST/UNIT	AMOUNT
DISTURBED AREAS				
Haul Roads	7.50	AC		
Mine Site	22.79	AC		
TOTAL DISTURBED Active	30.29	AC		
TOPSOIL SALVAGE				
Mine Area	20,450	YD3		
Haul Roads	3,226	YD3		
TOTAL TOPSOIL	23,676	YD3		
REGRAIDING				
200HP DOZER, MEANS 025 122 0011	\$0.50	/SY	(\$2,420.00/AC)	
Regrade Haul Roads	7.50	AC	\$2,420.00	\$18,200.00
Regrade Mine Site	22.79	AC	\$2,420.00	\$55,200.00
RIPPING				
200HP DOZER, MEANS 022 278 2800	\$0.99	/YD3		
Place and rip topsoil - Haul Roads	3,226	YD3	\$0.99	\$3,200.00
Place and rip topsoil - Mine Site	20,450	YD3	\$0.99	\$20,200.00
DRAINAGE RECONSTRUCTION				

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County Canyon Plan Amendment
M/023/024
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Determination of Surety Amount			Last Revised	July 9, 1997
County Canyon Shale Quarry, Ash Grove Cement Company		M/023/024	Juab County	Utah
ACTIVITY	QUANTITY	UNITS	COST/UNIT	AMOUNT
RIPRAP, MACHINE PLACED MEANS 022 712 0100	\$29.50	/YD3		
Side Canyon Drainage (800 FT x 0.6 YD3/FT)	240	YD3	\$29.50	\$7,100.00
REVEGETATION				
SEED/FERTILIZER/SCARIFICATION	\$225.00	AC		
Revegetate Haul Roads	7.5	AC	\$225.00	\$1,700.00
Revegetate Mine Site	22.79	AC	\$225.00	\$5,100.00
MOBILIZATION/DEMOBILIZATION				
Lump Sum				\$3,000.00
CONSTRUCTION SUPERVISION				
SUPERVISOR, Foreman (MEANS)	\$44.70	/HR		
1 week supervision @ 40 hours/week	40	HRS	\$44.70	\$1,800.00
SUBTOTAL				\$115,500.00
CONTINGENCY, @ 10%				\$11,600.00
SUBTOTAL (1997\$)				\$127,100.00
ESCALATION, @ 2.52% PER YEAR, FOR FOUR YEARS (2001\$)				\$13,300.00
TOTAL BOND AMOUNT REQUIRED (ROUNDED TO THE NEAREST \$1,000)				\$140,000.00
(Cost per acre = \$4,600)				